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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,851	01/26/2007	Kazuhiro Chiba	287575US0PCT	5504
22850 7590 07/13/2011 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER LEVKOVICH, NATALIA A				
ART UNIT 1773		PAPER NUMBER		
NOTIFICATION DATE 07/13/2011		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/574,851

**Applicant(s)**

CHIBA, KAZUHIRO

**Examiner**

Natalia Levkovich

**Art Unit**

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04/27/2011.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-23 and 31-38 is/are pending in the application.  
4a) Of the above claim(s) 33,35,36 and 38 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 21-23,31,32,34 and 37 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 01/18/2011 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendments filed on 01/18/2011 have been acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

### ***Election/Restrictions***

3. Applicant's election of Species 2 (claims 23, 32, 34 and 37) made with traverse in the reply filed on 04/27/2011, has been acknowledged. The traversal is on the grounds that 'the Office has not shown that a burden exist in searching all of the claims'; that 'the Examiner has already performed an examination of claim 23; and that 'the Office has not provided sufficient reasons to support the conclusion of patentable distinctness'. Examiner disagrees and notes that the 03/31/2011 Office action clearly identifies the species as being patentably distinct due to their divergent subject matter, as described in the action. The only technical feature, common for the species in question, is the stirrer ['stimulator] and the cooler. This feature does not contribute any novelty over the prior art, since it is very well known, as evidenced, for example, by the teaching of Horhota, as presented in the prior Office actions. Therefore, the unity of the species is lacking. Additionally, there would be a serious search and examination

burden if the restriction were not required, since the newly added claims further diversify the divergent subject matter of the species in question, and further examination would inevitably involve separate searches based on different search strategies, terms, queries and reasoning, which would, undoubtedly, present a significant and undue burden on the Examiner.

The requirement is still deemed proper and is therefore made FINAL.

Consequently, claims 33, 35- 36 and 38 have been withdrawn from further consideration as being directed to the non-elected inventions. Claims 21-23, 31, 32, 34 and 37 will be further examined on the merits according to the election made. It is further noted that where Applicant elects a species and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable species will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

### ***Drawings***

4. The drawings filed on 01/18/2011 are objected to as introducing new matter. In particular, the newly added Figure 5 shows the layout that includes details not originally presented (such as the stirrers arranged at an angle relative

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to the containers). Additionally, the drawings are replete with inaccuracies. For example, the reference character 'b' appears to be directed to the bottom of the container, and not to the heater, as alleged, nor to the heater configured 'for heating a number of reaction containers simultaneously, as recited. Note that the objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

5. Claims 21-23, 31, 32, 34 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being unclear for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 21, as amended, it is unclear how the recited functionality can be implemented without the controller being further connected to the cooler. It is also unclear whether or not the cooler 'to be placed within the reaction chamber without cooling the reaction container', must be positioned into the container so as to avoid direct contacts with the inner surfaces of the container. The same consideration applies to claim 31. Additionally, it is not clear what features must distinguish the 'uniform solution' from the 'two phase solution'. See also claim 31.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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7. Claims 21-23, 31, 32, 34 and 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 21, as amended, recites 'the controller being configured for 'controlling putting the sample in each reaction container, stirring the sample in the reaction container, and cooling the uniform solution in the reaction container'. No sufficient and adequate support was found for this feature in the original specification. While the specification supports the controller being configured for controlling the time of the start of operation and the time of the stop of the operation, it does not describe the limitation in question.

Claim 31, as amended, recites a 'cooling apparatus configured to be placed in the uniform solution within the reaction container '. This is not supported by the original specification which merely describes 'an *apparatus for placing a solid having a temperature that is lower than the temperature of a reaction container into a uniform solution* '. The specification does not describe an apparatus to be placed within the reaction container, [for putting a solid] as recited in claims 31-32.

***Claim Rejections - 35 USC § 102***

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8. Claims 21-23, 31, 32, 34 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Horhota (US 20010036898).

With respect to claims 21, 23, 31, 32, 34 and 37, Horhota discloses an extraction apparatus comprising, as shown in Figure 1, an isothermal oven 10 [‘heater for heating a number of reaction containers simultaneously and maintaining the reaction containers at a predetermined temperature’, ‘stimulator’]; metering pump 6 [‘sampler’] configured for supplying additives into reaction container(s) 9; and metering pump 3 fitted with a cooled head [‘cooler’] configured for ‘cooling the uniform solution within the reaction container without cooling the reaction container’, ‘means for putting a solid of which the temperature is lower of that of the reaction container’]. The cooled head is clearly capable of placing low temperature solids, such as cooled suspensions, into the container. Horhota also discloses apparatuses having an impeller [‘stirrer’, ‘stimulator’, ‘mixing means’ - see paragraph [0015]]; and further teaches in [0051] that the ‘rates of extraction or reaction may be controlled through the selection of suitable magnitude, frequency and hold times’ for pressure modulations, which means that the apparatus must include a controller for selecting, setting and controlling suitable hold times.

In reference to claim 22, as was noted previously, since the solutions are not positively recited as a part of the claimed invention, they are not accorded any patentable weight.

***Claim Rejections - 35 USC § 103***

9        Alternatively, claims 21-23, 31, 32, 34 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horhota.

Horhota does not explicitly describe the impeller ['stirrer', 'stimulator', 'mixing means' as a feature included into the invented apparatus. However, it would have been clearly within the ordinary skill of an artisan at the time the invention was made, .to have modified the apparatus of Horhota by employing an impeller, in order to further improve mixing in the reaction container.

***Response to Arguments***

10.     Applicant's arguments filed on 04/27/2011 have been fully considered but they are not persuasive, or moot in view of new grounds of rejection.

Applicant argues that In Horhota, the cooling head 'does not directly cool the uniform solution without also cooling the reaction container', since claim 21 of Horhota recites 'a cooler configured to be placed in the sample within the reaction container and which cools the uniform solution within the reaction container without cooling the reaction container' and claim 31 recites a 'cooling apparatus configured to be placed in the uniform solution within the reaction container and which cools the uniform solution within the reaction container without cooling the reaction container'.

Examiner disagrees and notes that, as discussed above, the apparatus of Horhota does include a cooled head capable of placing low temperature solids,



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such as cooled suspensions, into the container. It is further emphasized that there is no sufficient and adequate support for the cooler apparatus configured to be placed into the container for providing a low temperature substance. It would have been also within the ordinary skill of an artisan to have modified Horhota by providing such cooling apparatus (for example, a probe with a cooled suspension), in order to gain additional temperature control capabilities in a reliable and simple fashion.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Levkovich whose telephone number is 571-272-2462.

The examiner can normally be reached on Mon-Fri, 2 p.m.-10 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Natalia Levkovich/

Primary Examiner, Art Unit 1773

